

WHAT IS CLAIMED IS:

1. A computer-implemented method for dynamically displaying a path between at least two geographic locations, comprising:
 - displaying a two-dimensional representation of three-dimensional geographic data;
 - receiving a user input specifying an initial location on the two-dimensional
 - 5 representation;
 - receiving additional user input specifying a plurality of intermediate locations and terminating with a final location; and
 - while receiving the additional user input, dynamically displaying a great circle path extending from the initial location toward each of the plurality of intermediate locations and
 - 10 terminating at the final location.
2. The method of claim 1, wherein:
 - receiving a user input specifying the initial location comprises receiving input corresponding to a user positioning a cursor over the initial location on the two-dimensional representation and inputting a first cursor position; and
 - 15 receiving additional user input specifying a plurality of intermediate locations comprises receiving input corresponding to a user dragging the cursor on the two-dimensional representation from the first cursor position to a position over the final location.
3. The method of claim 1, wherein:
 - receiving user input specifying the initial location comprises receiving user input
 - 20 corresponding to a user positioning a cursor over the initial location on the two-dimensional representation and inputting a first cursor position; and
 - receiving additional user input specifying a plurality of intermediate locations comprises the receiving input corresponding to a user positioning the cursor over the final location on the two-dimensional representation and inputting a second cursor position.
- 25 4. The method of claim 1, further comprising:
 - displaying a great circle distance corresponding to the great circle path, including dynamically updating the great circle distance based on the additional user input while receiving the additional user input.

5. The method of claim 1, further comprising:
displaying an initial direction corresponding to the great circle path, including dynamically updating the initial direction based on the additional user input while receiving the additional user input.
- 5 6. The method of claim 1, further comprising:
receiving additional user input specifying at least one additional final location on the two-dimensional representation; and
while receiving the additional user input, dynamically displaying a second path extending from a final location toward the additional final location, the second path
10 terminating at the additional final location upon completion of receipt of the additional user input and the second path representing a great circle path between the final location and the additional final location.
7. The method of claim 6, further comprising:
displaying a total great circle distance being the sum of a great circle distance
15 corresponding to the great circle path between the initial location and the final location and the great circle distance corresponding to the second path between the final location and the additional final location.
8. The method of claim 1, wherein displaying a great circle path extending from the initial location toward each of the plurality of intermediate locations and terminating at the
20 final location, comprises:
displaying a first portion of the path, the first portion extending from the initial location to an outer boundary of the two-dimensional representation;
displaying a second portion of the path, the second portion extending from an outer boundary of the two-dimensional representation to the final location; and
25 displaying a graphical element linking the first portion of the path to the second portion of the path, wherein the first portion and the second portion together comprise the great circle path between the initial location and the final location.
9. A computer-implemented method for dynamically displaying an area bounded by great circle paths, comprising:

displaying a two-dimensional representation of three-dimensional geographic data;
 receiving a user input specifying at least three locations on the two-dimensional
 representation, each location representing a vertex where the vertices together define an area;
 while receiving the user input, dynamically displaying a boundary path between
 5 adjacent locations, where each boundary path represents a great circle path between the
 adjacent locations and where the boundary paths together enclose an area.

10. The method of claim 9, further comprising:
 displaying a value of a three-dimensional area represented by the enclosed area on the
 two-dimensional representation.

10 11. The method of claim 10, further comprising:
 receiving a user input specifying a modification to at least one of the locations;
 dynamically displaying one or more modified boundary paths based on the
 modification to the at least one location; and
 dynamically displaying a modified value of a three-dimensional area represented by
 15 a modified enclosed area on the two-dimensional representation.

12. The method of claim 11, further comprising:
 dynamically displaying a modified great circle distance corresponding to a modified
 cumulative distance of the boundary paths between adjacent locations.

13. The method of claim 9, further comprising:
 20 displaying a great circle distance corresponding to a cumulative distance of the
 boundary paths between adjacent locations.

14. The method of claim 9, wherein displaying a boundary path between at least two of
 the locations comprises:
 displaying a first portion of the boundary path, the first portion extending from a first
 25 location to an outer boundary of the two-dimensional representation;
 displaying a second portion of the boundary path, the second portion extending from
 an outer boundary of the two-dimensional representation to an adjacent, second location; and
 displaying a graphical element linking the first portion of the boundary path to the

second portion of the boundary path, wherein the first portion and the second portion together comprise the great circle path between the first location and the second location.

15. A computer-implemented method for dynamically displaying a path between at least two geographic locations, comprising:

5 displaying a two-dimensional representation of three-dimensional geographic data;
receiving a user input specifying an initial location on the two-dimensional representation;

receiving additional user input specifying a plurality of intermediate locations and terminating with a final location; and

10 dynamically displaying a path of constant direction extending from the initial location toward each of the plurality of intermediate locations and ultimately terminating at the final location.

16. The method of claim 15, wherein:

receiving a user input specifying the initial location comprises receiving input
15 corresponding to a user positioning a cursor over the initial location on the two-dimensional representation and inputting a first cursor position; and

receiving additional user input specifying a plurality of intermediate locations comprises receiving input corresponding to a user dragging the cursor on the two-dimensional representation from the first cursor position to a position over the final location.

20 17. The method of claim 15, wherein:

receiving user input specifying the initial location comprises receiving user input corresponding to a user positioning a cursor over the initial location on the two-dimensional representation and inputting a first cursor position; and

receiving additional user input specifying a plurality of intermediate locations
25 comprises a receiving input corresponding to a user positioning the cursor over the final location on the two-dimensional representation and inputting a second cursor position.

18. The method of claim 15, further comprising:

displaying a distance corresponding to the distance of the path of constant direction,

including dynamically updating the distance based on the additional user input while receiving the additional user input.

19. The method of claim 15, further comprising:
displaying a direction of the path of constant direction.

5 20. A computer program product, tangibly stored on a computer-readable medium, for dynamically displaying a path between at least two geographic locations, comprising instructions operable to cause a programmable processor to:

display a two-dimensional representation of three-dimensional geographic data;
receive a user input specifying an initial location on the two-dimensional

10 representation;

receive additional user input specifying a plurality of intermediate locations and terminating with a final location; and

while receiving the additional user input, dynamically display a great circle path extending from the initial location toward each of the plurality of intermediate locations and
15 ultimately terminating at the final location.

21. The computer program product of claim 20, wherein:

instructions operable to receive a user input specifying the initial location comprise instructions operable to receive input corresponding to a user positioning a cursor over the initial location on the two-dimensional representation and entering a first cursor position;

20 and

instructions operable to receive additional user input specifying a plurality of intermediate locations comprise instructions operable to receive input corresponding to a user dragging the cursor on the two-dimensional representation from the first cursor position to a position over the final location.

25 22. The computer program product of claim 20, wherein:

instructions operable to receive user input specifying the initial location comprise instructions operable to receive user input corresponding to a user positioning a cursor over the initial location on the two-dimensional representation and entering a first cursor position;
and

instructions operable to receive additional user input specifying a plurality of intermediate locations comprise instructions operable to receive input corresponding to a user positioning the cursor over the final location on the two-dimensional representation and entering a second cursor position.

- 5 23. The computer program product of claim 20, further comprising instructions operable to:

display a great circle distance corresponding to the great circle path and dynamically update the great circle distance based on the additional user input while receiving the additional user input.

- 10 24. The computer program product of claim 20, further comprising instructions operable to:

display an initial direction corresponding to the great circle path and dynamically update the initial direction based on the additional user input while receiving the additional user input.

- 15 25. The computer program product of claim 20, further comprising instructions operable to:

receive additional user input specifying at least one additional final location on the two-dimensional representation; and

- 20 while receiving the additional user input, dynamically display a second path extending from a final location toward the additional final location, the second path terminating at the additional final location upon completion of receipt of the additional user input and the second path representing a great circle path between the final location and the additional final location.

- 25 26. The computer program product of claim 25, further comprising instructions operable to:

display a total great circle distance being the sum of a great circle distance corresponding to the great circle path between the initial location and the final location and the great circle distance corresponding to the second path between the final location and the additional final location.

27. The computer program product of claim 20, wherein instructions operable to display a great circle path extending from the initial location toward each of the plurality of intermediate locations and terminating at the final location, comprise instructions operable to:

5 display a first portion of the path, the first portion extending from the initial location to an outer boundary of the two-dimensional representation;

display a second portion of the path, the second portion extending from an outer boundary of the two-dimensional representation to the final location; and

10 display a graphical element linking the first portion of the path to the second portion of the path, wherein the first portion and the second portion together comprise the great circle path between the initial location and the final location.

28. A computer program product, tangibly stored on a computer-readable medium, for displaying an area bounded by great circle paths, comprising instructions operable to cause a programmable processor to:

15 display a two-dimensional representation of three-dimensional geographic data;

receive a user input specifying at least three locations on the two-dimensional representation, each location representing a vertex where the vertices together define an area;

while receiving the user input, dynamically display a boundary path between adjacent locations, where each boundary path represents a great circle path between the adjacent locations and where the boundary paths together enclose an area.

20 29. The computer program product of claim 28, further comprising instructions operable to:

display a value of a three-dimensional area represented by the enclosed area on the two-dimensional representation.

25 30. The computer program product of claim 29, further comprising instructions operable to:

receive a user input specifying a modification to at least one of the locations; dynamically display one or more modified boundary paths based on the modification to the at least one location; and

30 dynamically display a modified value of a three-dimensional area represented by a modified enclosed area on the two-dimensional representation.

31. The computer program product of claim 30, further comprising instructions operable to:

dynamically display a great circle distance corresponding to a modified cumulative distance of the boundary paths between adjacent locations.

5 32. The computer program product of claim 28, further comprising instructions operable to:

display a great circle distance corresponding to a cumulative distance of the boundary paths between adjacent locations.

33. The computer program product of claim 28, wherein instructions operable to display
10 a boundary path between at least two of the locations comprise instructions operable to:

display a first portion of the boundary path, the first portion extending from a first location to an outer boundary of the two-dimensional representation;

display a second portion of the boundary path, the second portion extending from an outer boundary of the two-dimensional representation to an adjacent, second location; and

15 display a graphical element linking the first portion of the boundary path to the second portion of the boundary path, wherein the first portion and the second portion together comprise the great circle path between the first location and the second location.

34. A computer program product, tangibly stored on a computer-readable medium, for dynamically displaying a path between at least two geographic locations, comprising
20 instructions operable to cause a programmable processor to:

display a two-dimensional representation of three-dimensional geographic data;

receive a user input specifying an initial location on the two-dimensional representation;

25 receive additional user input specifying a plurality of intermediate locations and terminating with a final location; and

dynamically display a path of constant direction extending from the initial location toward each of the plurality of intermediate locations and terminating at the final location.

35. The computer program product of claim 34, wherein:
instructions operable to receive a user input specifying the initial location comprise

instructions operable to receive input corresponding to a user positioning a cursor over the initial location on the two-dimensional representation and entering a first cursor position; and instructions operable to receive additional user input specifying a plurality of intermediate locations comprise instructions operable to receive input corresponding to a user dragging the cursor on the two-dimensional representation from the first cursor position to a position over the final location.

36. The computer program product of claim 34, wherein:

instructions operable to receive user input specifying the initial location comprise instructions operable to receive user input corresponding to a user positioning a cursor over the initial location on the two-dimensional representation and entering a first cursor position; and

instructions operable to receive additional user input specifying a plurality of intermediate locations comprise instructions operable to receive input corresponding to a user positioning the cursor over the final location on the two-dimensional representation and entering a second cursor position.

37. The computer program product of claim 34, further comprising instructions operable to:

display a distance corresponding to a distance of the path of constant direction and dynamically update the distance based on the additional user input while receiving the additional user input.

38. The computer program product of claim 34, further comprising instructions operable to:

display a direction of the path of constant direction.